Reply Filed: September 8, 2003

REMARKS

In reply to the Final Office Action mailed April 7, 2003, and in view of the foregoing amendments and following remarks, reconsideration is requested. Claims 1-11 remain in this application of which claim 1, 4 and 11 are independent. Entry of these amendments is respectfully requested.

Rejection Under 35 U.S.C. §103

Claims 1-11, of which claims 1, 4 and 11 are independent, were rejected under 35 U.S.C. §103 in view of U.S. Patent 5,889,514 ("Boezeman") and Hamakawa. The rejection is respectfully traversed for the following reasons.

Teachings of Boezeman

According to Boezeman, Fig. 2 shows a sequence editor screen 60 with a time line 84, for creation of multimedia titles. *Boezeman*, Col. 6, lines 1 and 19; Col. 1, line 30. Multimedia refers to "time-based data" in "various combinations of text, graphics, video, image, animation, audio, etc." *Boezeman*, Col. 1, lines 38-40.

According to Boezeman, the "sequence editor organizes its time based specification by event. In other words, a user specifies an event that will initiate a sequence of time based processing." *Boezeman*, Col 5, lines 61-64. For example, as shown in Fig. 3, the event of "PushButton1" being "clicked" initiates the sequence of time-base processing represented by the time line 84. See also *Boezeman*, Col 8, lines 49-53. The text of Col 7, lines 5-54 explains how a user places animation, audio and video parts on the time line associated with this event.

Teachings of Hamakawa

According to Hamakawa, using a "time line model" there is "no mechanism to ensure that the length of one media data will dynamically conform to the length of another one. . . . Moreover, different media data are not automatically synchronized with one another. . . . Further, the time line model has no functions for reusing multimedia data." *Hamakawa*, p. 273, second column, first paragraph.

According to Hamakawa, an "object composition and playback model [uses] 'temporal glue' . . . and a mechanism for constructing composite multimedia data hierarchically. In the

Reply Filed: September 8, 2003

resulting model, it is quite easy to edit and reuse composite multimedia data." *Hamakawa*, p. 274, first column, first paragraph. More particularly, users "create a composite object by combining multimedia objecxts according to certain designated methods. There are three features in the proposed model that differentiate it from the time line model." *Hamakawa*, p. 274, first column, third paragraph. These "three features" are the "temporal glue" and "object hierarchy" that are designed to solve the problems of time lines, along with the concept of "relative locations" that the object hierarchy and temporal glue use. See *Hamakawa*, p. 274, generally. By "relative location," Hamakawa means that "users do not decide the precise time line location for each object. They define only relative locations in time and space among objects. Once objects are composed, their absolute locations (both in time and space) are calculated automatically." *Hamakawa*, p. 274, paragraph bridging both columns.

According to Hamakawa, the object composition model includes an object (SEBox) for sequencing of objects, which defines only relative locations in a sequence in time among objects operated on by the SEBox Object (p. 274, col. 2). Objects that are intended to be simultaneous are combined by an Overlay Object (p. 275, Col. 1). A Position Object may place an object on a specific section of an absolute time scale (p. 275, Col. 1).

The Final Office Action asserts (at page 10) that Hamakawa "teaches presented time line embodiments as shown in Hamakawa Figures 12, 14 and 16." Applicant respectfully disagrees. Neither Fig. 12, 14 nor 16 shows a time line for constructing a multimedia program. Figs. 12 and 16 merely show a playback window for an entire program which merely shows the current playback position in time for the multimedia program being played. Fig. 14 is not a time line because it does not have precise time line locations (the intended outcome of using only relative time line locations).

Proposed Combination of Hamakawa and Boezeman

The Office Action asserts that one of ordinary skill in the art would have been motivated to combine the teachings of Hamakawa and Boezeman. In particular, the Office Action states that it "would have been obvious . . . to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of automatic temporal re-mapping of time lines within groupings . . . of multimedia objects, providing increased convenience (due to elimination for precise time line locations), to Boezeman's NLE editor." Final Office Action, page 4. Further the Office Action

Reply Filed: September 8, 2003

states that it "would have been obvious . . . to apply Hamakawa to Boezeman, because of Hamakawa's taught advantage of hierarchically categorized composite objects, providing an increase number of object groupings to be used by Boezeman's NLE system." *Id*.

The Applicant previously argued that, instead of modifying a time line, Hamakawa proposes a completely new system with "three features in the proposed model that differentiate it from the time line model." Hamakawa neither teaches nor suggests that these features may be used in a time line system and uses them to differentiate from a time line based system. In fact, at the bottom of p. 277, Hamakawa states: "This facility encourages the user to revise and reuse previously constructed composite multimedia objects because it eliminates the need for precise time line locations." Thus, the Applicant argued that one would not have been motivated by Hamakawa to *combine* the teachings of Hamakawa with those of Boezeman.

The Final Office Action replied that Hamakawa notes problems of a time line system, and that "Hamakawa's article proposed various solutions to these problems, the Examiner applies said solutions to Boezeman's time line editor." *Final Office Action*, p. 10.

In response, because Hamakawa's article suggests a system that is a *substitute* for and is distinguished from a time line model, the suggestion to apply Hamakawa's solutions to Boezeman in manner such that Boezeman remains a time line system is not something that arises out of Hamakawa. Instead, Hamakawa's teachings as applied to Boezeman would replace Boezeman's timeline with the object model of Hamakawa, and, thus, the result would no longer be a timeline based system – and would essentially be no different from Hamakawa.

Furthermore, how Hamakawa's solutions would have been applied to Boezeman's time line editor, in manner such that Boezeman remains a time line system, is not explained in the Office Action. As noted above, Hamakawa's solutions (and, in particular, the use of relative locations) are intended to replace a time line system. How one would have modified Boezeman by applying Hamakawa's solutions is not evident from the Office Action, Hamakawa or Boezeman. Therefore it is not possible to compare the claims to the combination proposed by the Final Office Action if such a combination would result in anything different from Hamakawa or Boezeman alone.

Accordingly, the combination proposed in the Final Office Action is not supported by the evidence and the rejection is traversed.

Reply Filed: September 8, 2003

Said another way, Hamakawa teaches *directly away* from applying its object hierarchy model (with relative object locations) to a time line (with precise object locations) because Hamakawa's system is intended to be a *substitute* for a time line system. Hamakawa's teachings of using "relative locations" instead of "precise time line locations" directly contradicts any suggestion that such relative locations could be used in a time line model such as Boezeman that requires precise time line locations.

Accordingly, because the prior art teaches away from the combination proposed in the Final Office Action, the rejection is traversed.

Comparison of Claims to Boezeman and Hamakawa

Notwithstanding the foregoing, even if Hamakawa and Boezeman would have been combined in the manner suggested by the Examiner, the claims as amended distinguish over any such combination.

Independent claim 1 recites, among other things, the following:

"positioning a first clip object representing the first time-based data source with respect to a local time line to define a start time and duration on the local time line for accessing the first time-based data source; ...

positioning a second clip object representing the second time-based data source with respect to the local time line to define a start time and duration on the local time line for accessing the second time-based data source;

creating at least one meta-clip object representing the local time line and the first and second clip objects positioned on the local time line, wherein the at least one meta-clip object is positionable with respect to a global time line of an edit, distinct from the local time line, such that the start time and duration of each of the first and second clip objects in the at least one meta-clip are re-mapped to the global time line upon the at least one meta-clip being positioned on the global time line"

Similarly, independent claim 4 recites, among other things, the following:

"[a] meta-clip object... comprising a ... local time line distinct from the global time line, a first clip object representing a first time-based data source selected from a list of available

Reply Filed: September 8, 2003

data sources, and a second clip object representing a second time-based data source selected from the list of available data sources, wherein the second data source is of a different data type than the first data source, and wherein the first and second clip objects are positioned on the local time line to define a respective start time and duration on the local time line for accessing each selected data source;

... positioning [a] selected meta-clip object with respect to the global time line; and re-mapping to the global time line the start time and duration of the clip objects comprising each selected meta-clip object in accordance with the position of ... [the] selected meta-clip object on the global time line."

Similarly, independent claim 11 recites, among other things, the following:

"[a] meta-clip object . . . comprising a . . . local time line, a first clip object representing a first one of the stored data sources, a second clip object representing a second one of the stored data sources, wherein the second data source is of a different data type than the first data source, and wherein the first and second clip objects are positioned on the local time line to define a respective start time and duration on the local time line for accessing each data source; and

... positioning ... [a] selected meta-clip object on a global time line distinct from the local time lines so as to initiate re-mapping of the start time and duration of each of the clip objects represented by the meta-clip objects according to the relative position of the local time lines and the global time line."

Thus, each of the independent claims recites that objects of different types may be positioned on a local time line as part of a meta-clip and that when the meta clip object is positioned on the global time line, the start time and duration of each clip in the meta clip is remapped to the global time line. Neither Hamakawa nor Boezeman teaches or suggests these limitations.

More particularly, Boezeman teaches that each of the video, audio and animation objects is placed at a specific position on a time line. There is no facility in Boezeman for creating a "meta clip" having objects placed on a "local time line" of which the start time and duration are remapped to a "global time line" when the meta clip object is placed on the global time line.

Reply Filed: September 8, 2003

Further, in Hamakawa, none of the objects used in an object composition have a local time line. As clearly stated in Hamakawa, "users do not decide the precise time line location for each object. They define only relative locations in time and space among objects." There is no object in Hamakawa that corresponds to a meta-clip object as claimed – no object in Hamakawa has a "local time line" on which two objects of different types may be positioned and of which the start time and duration are remapped to a "global time line" when the meta clip object is placed on the global time line. Instead, in Hamakawa, the positions of each object in time are determined only when the highest ranking composite object is determined.

Finally, it is unclear how the teachings of Hamakawa, if these teachings would be applied to Boezeman, would meet this limitation, because it is unclear (as noted above) *how* those Hamakawa's teachings would be applied to Boezeman.

Accordingly, the rejection of independent claims 1, 4 and 11 is traversed. The remaining claims are dependent claims that are allowable for the same reasons.

Reply Filed: September 8, 2003

CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this reply, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, please charge any fee to **Deposit** Account No. 50-0876.

Respectfully submitted

Peter J. Gordon/Reg. No. 35,164

Avid Technology, Inc.

One Park West

Avid Technology Park

Tewksbury, Massachusetts 01876

Tel. No.: 978.640.3011 Attorney for Applicant Date: September 8, 2003

RECEIVED
CENTRAL FAX CENTER

SEP 0 9 2003

OFFICIAL